

ABSTRACT OF THE DISCLOSURE

An optical projection system can receive a red light beam, green light beam, and blue light beam. The optical projection system includes a color-combination prism, and the light beams respectively enter the color-combination prism from three surfaces and
5 are combined into a mixed light beam, which exits from another surface. A projection lens set receives the mixed light beam to perform the projection. Each of the light beams further includes a liquid crystal reflection panel and a wire grid polarizer (WGP). The liquid crystal reflection panel is parallel to the corresponding surfaces of the color-combination prism. In the design, before the light beam entering the color-combination
10 prism, they are first reflected by the WGP onto the liquid crystal reflection panel, and the liquid crystal reflection panels respectively with a polarizing state reflect the light beams, passing through the WGP and directly propagating toward the color-combination prism.